

1 BEFORE THE ARIZONA CORPORATION COMMISSION 2 **COMMISSIONERS** Arizona Corporation Commission 3 BOB STUMP, Chairman DOCKETED **ORIGINAL GARY PIERCE** 4 **BRENDA BURNS** JUN 1 0 2014 **BOB BURNS** 5 SUSAN BITTER SMITH DOCKETED BY 6 7 8 IN THE MATTER OF THE APPLICATION OF DOCKET NO. E-01749A-13-0184 GRAHAM COUNTY ELECTRIC COOPERATIVE, 9 **COMPLIANCE - 2013 ANNUAL REST** INC. APPLICATION FOR APPROVAL OF ITS REPORT 2013 RENEWABLE ENERGY STANDARD 10 TARIFF AND IMPLEMENTATION PLAN 11 12 13 Graham County Electric Cooperative, Inc. ("GCEC") hereby submits its annual REST 14 compliance report for the calendar year 2013 pursuant to A.A.C. R14-2-1812. 15 16 RESPECTFULLY SUBMITTED this 9th day of June 2014 17 Graham County Electric Cooperative, Inc. By Shan U, What 18 19 Than Ashby Graham County Electric Cooperative, Inc. 20 21 Original and thirteen (13) copies filed this 9th day of June, 2014, with: 22 **Docket Control** 23 **Arizona Corporation Commission** 1200 W. Washington, 24 Phoenix, AZ 85007 25

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## Renewable Energy Standard and Tariff Compliance Report Compliance Year 2013

Submitted June 9, 2014

### Graham County Electric Cooperative, Inc. Renewable Energy Standard and Tariff Compliance Report Compliance Year 2013

### INTRODUCTION

Pursuant to A.A.C. R14-2-1812, Graham County Electric Cooperative, Inc. ("GCEC") submits this compliance report for calendar year 2013. This report relates to GCEC's 2013 Renewable Energy Standard and Tariff Plan ("REST Plan"), approved by the Arizona Corporation Commission (the "Commission") in Decision No. 73631 dated January 31, 2013.

### **EXECUTIVE SUMMARY**

The REST Plan uses surcharge dollars from GCEC's Commission-approved retail tariffs to support programs for developing renewable facilities, purchasing renewable energy and participation in large-scale renewable generation projects. Funds may also be used for administration, advertising and educational activities.

The REST Plan for 2013 was approved pursuant to R14-2-1814. R14-2-1814 provides that, upon Commission approval of GCEC's REST Plan, its provisions substitute for the Annual Renewable Energy and Distributed Renewable Energy requirements of Rules 1804 and 1805, respectively.

### **2013 INSTALLATIONS AND ENERGY GENERATED**

In 2013, 15 new Photovoltaic ("PV") systems were installed in GCEC's service area. Of these new systems, all of them were on-grid for a total installed capacity of 150.8 kW. Additionally, of these new systems, all 15 are distributed generation (13 residential and 2 commercial).

These additions bring the total number of renewable generation installations in GCEC's service area by the end of 2013 to 148. This includes 141 PV installations (35 off-grid, 106 on-grid) with a total installed capacity of 853.429 kW, 6 wind installations with a total capacity of 34 kW and 1 solar water heating installation expected to save approximately 1,163 kWh per year. In 2010 as part of a REC allocation settlement with other electric Cooperatives, GCEC relinquished the rights to annual REC's in the amount of 555,780 kWh. The total renewable energy generated in 2013 for which GCEC can claim credit is 2,502 MWh.

### **2013 REQUIRED REPORTING INFORMATION**

The ACC requested that the Electric Utilities develop a standard REST reporting format. GCEC submits the following tables to meet this requirement (see attached tables).

Table 1a – Renewable Resources
Table 1b – Compliance Summary
Table 2b – RES Cash Incentive Costs

The following tables were not included because they are not applicable to GCEC's REST program

Table 2a - RES Resource Costs
Implementation Plan Table 1 – Targeted Resources
Implementation Plan Table 2 – Targeted RES Resources Costs

### **Financial Summary**

| REST Surcharge Funds Collected | \$241,813.36        |
|--------------------------------|---------------------|
| Rollover Funds From 2012       | <u>\$168,405.98</u> |
| Total Funds Available for 2013 | \$410,219.34        |

### **Expenses**

| Incentives Paid (UFI)        | \$296,195.22 |
|------------------------------|--------------|
| Incentives Paid to WGH (PBI) | \$17,009.94  |
| Administration               | \$34,055.51  |
| AZ Goes Solar Website        | \$60.72      |

| Total Expenses   | <b>\$347,321.39</b> |
|--|---------------------|
| Balance <sup>1</sup> Rollover to the 2014 REST Program | <u>\$ 62,897.95</u> |

<sup>&</sup>lt;sup>1</sup> Balance includes over \$35,500 of incentives that were given approval in 2013 but had not yet completed their projects.

## Compliance Report - Energy

Table 1a - Renewable Resources

| Resource   | Technology                            | Ownership MWac <sup>1</sup>                          | .1 MWdc1                | Production Prod<br>(Actual) + (Annu | Production (Annualized) <sup>2</sup> + | Multiplier<br>Credits = | Total MWh or<br>Equivalent   |       |
|--|---------------------------------------|--|-------------------------|-------------------------------------|--|-------------------------|------------------------------|-------|
| GENERATION:  | n/a                                   |  |                         |                                     |  |                         |                              |       |
| Gross Total (if needed)<br>Adjustments (if needed)<br><b>Subtotal Generation</b>                             |                                       |  |                         |                                     |  |                         |                              | €     |
| <b>DISTRIBUTED ENERGY (DE):</b> Residential:   | <b>PV</b><br>SWH<br>Wind              | Customer<br>Customer<br>Customer                     | 0.482<br>0.001<br>0.034 |                                     | 1,056<br>1<br>74                       |                         | 1,056<br>1<br>74             |       |
| Gross Total (if needed)<br>Adjustments (if needed)<br>Subtotal Residential                                   |                                       |  |                         |                                     |  |                         | 1,131<br>1,131               | (8)   |
| Non-Residential:   | PV<br>PV<br>SWH<br>Wind<br>Geothermal | Customer<br>GCEC<br>Customer<br>Customer<br>Customer | 0.094                   | 1,110                               | 207<br>54<br>-                         |                         | 207<br>54<br>-<br>-<br>1,110 |       |
| Gross Total (if needed) Adjustments (if needed) Subtotal Non-Residential Subtotal Distributed Energy ( B + C | (B+C)                                 |  |                         |                                     |  |                         | 1,371<br>1,371 (<br>2,502 (  | () () |
| Total RES Resources $(A + D)$<br>Total MWac equivalent <sup>3</sup>  |                                       |  |                         |                                     |  |                         | MARKS 105.555                | (E)   |

Notes to Table 1:

<sup>1</sup> Generation capacity is generally reported in MWac and DE is generally reported in MWdc.

<sup>2</sup> Assumes 2,190 kWh per installed kW for non-metered or current year installed residential PV systems, and 2,190 kWh per installed kW for similar non-residential systems.

<sup>3</sup> Represents the total RES portfolio capacity in MWac. Assumes a 90% dc-ac conversion factor applied to MWdc capacity.

# Compliance Report - Energy

Table 1b - Compliance Summary

|  |                      |      |               | ne diministration and and |   |
|--|----------------------|------|---------------|---------------------------|---|
| Category   | Metric               | %    | Measure (MWh) | Equivalent)               | *************************************** |
| Retail Sales                                       | 155,679              | 4.0% | 6,227         | 6,227                     |   |
| Prior year carrying balance1                       |                      |      |               |                           | (F)                                     |
| 2013 Total RES Resources [From (E) i               | n (E) in Table 1a]   |      |               | 2,502                     | (E)                                     |
| 2013 Total RES Requirement                         | % of Retail Sales    | ۵/۷  |               |                           |   |
| DE Requirement                                     | % of RES Requirement | N/A  |               |                           | ************                            |
| DE Sub-Requirements:                               |                      |      |               |                           |   |
| Residential DE                                     | % of DE Requirement  | N/A  |               |                           | (9)                                     |
| Non-Residential DE                                 | % of DE Requirement  | N/A  |               |                           | H                                       |
| Non-DE Target                                      | % of RES Requirement | N/A  |               |                           | (I)                                     |
| Resources Used for 2013 Compliance ( $G + H + I$ ) | iance ( G + H + I )  |      |               | 6,227                     | (1)                                     |
|  |                      |      |               |                           |   |
| End 2013 carrying balance ( $F+E$                  | F+E-J)               |      |               | (3,725)                   | <u>S</u>                                |
|  |                      |      |               |                           | 7                                       |

Notes to Table 1b:

<sup>&</sup>lt;sup>1</sup>The RES-eligible resource carrying balance is accounted for using FIFO methodology, wherein the entire carrying balance is applied to the RES requirement and the year-end carrying balance consists of current year remaining resources.

Table 2b - RES Cash Incentive Costs

2013 Distributed Energy Cash Incentive Program Costs

|                                       |       |             | Up-Front Incentives  | ncentives             |                             |                | 2013 Total                |
|---------------------------------------|-------|-------------|----------------------|-----------------------|-----------------------------|----------------|---------------------------|
|                                       | ΜW    | MWh         | (\$/MW) <sup>1</sup> | (\$/MWh) <sup>1</sup> |                             |                | Incentives Paid<br>(\$)** |
| Residential:<br>PV                    | 0.118 | 258         | 1,603,433            | 732                   |                             |                | 188,634                   |
| Subtotal: Residential                 | 0.118 | 258         | 1,603,433            | 732                   |                             |                | 188,634                   |
|                                       |       |             | Up-Front Incentives  | ncentives             | Production-Based Incentives | sed Incentives | TITE IOLA                 |
| :                                     | ΜW    | MWh         | (\$/MW) <sup>1</sup> | (\$/MWh) <sup>1</sup> | (*/WM)                      | (\$/MWh)       | Incentives Paid<br>(\$)** |
| <i>Non-Residential:</i> PV Geothermal | 0.033 | 73<br>1,110 | 3,247,612            | 1,483                 | 33,566                      | 15             | 107,561<br>17,010         |
| Subtotal: Non-Residential             | 0.540 | 1,182       | 3,247,612            | 1,483                 | 33,566                      | 15             | 124,571                   |
| Total DE Incentive Costs              |       |             |                      |                       |                             |                | 313,205                   |

Notes to Table: <sup>1</sup> Based on expected annual system production. \*\* Incentives include funds that were reserved in the previous year but paid out in 2013